Patients' Satisfaction of a hospital in the home service

Abstract:

Background: With unprecedented demand for healthcare, alternative models of care have been developed with the Hospital in the home model allowing patients to return home and receive short-term treatment in a familiar environment.

Aims: The objective was to evaluate patient satisfaction with the @home service.

Method: A questionnaire was developed comprising of 20 questions, using 5-point Likert response with free text options for comments.

Findings: A total of 1426 questionnaires were distributed with 206 (14%) returned. The majority would recommend the @home service (n=200, 97%) and were very satisfied or satisfied with the service (n=203, 99%). 48 respondents provided qualitative free text comments and overall comments were very positive and supportive of the @home service.

Conclusion: This survey has shown the benefits of the GSTT@home programme as reported by patients and their family/carers and supports the benefits of the @home model of care form the patients' perspective.

Keywords: Hospital in the home, patient satisfaction, survey, models of care

Key points

- There are growing demands on acute hospital and community services
- There is an ageing population who require management of long term conditions
- Hospital in the home is a viable model of care
- A survey was undertaken to examine patient satisfaction with the @home service
- There was a low response rate (14%) but of those who responded there was a very high level of satisfaction
- The themes noted were patients preferred being treated in their own home, it was a service to be proud of and patients liked the staff and felt safe being treated at home.

Reflective questions

1. What are the types of conditions that can be managed by the @home team?
2. What aspects of the hospital in the home care did patients comment on?
3. Are there any aspects of the @home care that could be examined in a different way?
4. How does this type of service fit in with the current demands on the NHS?

Introduction

In the UK healthcare service, there are unprecedented demands on the service with 11.8 million people over 65 years and 4 million people living with long-term illnesses (Age UK, 2018). With the highest ever bed occupancy rates, emergency department (ED) staff aim to discharge patients back into the community for further management (Royal College of Surgeons, 2018). A King's Fund report highlighted the need for better alignment of primary, community and acute care to reduce avoidable hospital admissions and length of hospital stays (Imison et al., 2012) and this has been re-enforced with the recent 10-year plan (NHS England, 2019). The 'Hospital in the home' (HitH) model is one solution that allows patients to return home and receive short-term treatment in a familiar environment. Since its inception, many countries have created their own version of HitH services and reported on various aspects including efficacy, safety, cost and patient satisfaction with very positive results (Caplan et al, 1999; Van Donk et al., 2009, Montalto 2010, Rodriguez-Cerrillo et al 2012, Varney, Welland & Jelinek 2014) whilst also highlighting the need for strategic planning and coordinated partnerships (Brody et al 2019). One study noted that use of HitH resulted in a reduction in hospital readmissions from 7% to 3% (Rodriguez-Cerrillo et al 2012). Another review of HitH services concluded that HitH care was at least equivalent to hospital-based care and offered greater cost savings (Varney, Welland & Jelinek 2014). In terms of satisfaction with the HitH service, the literature reports the positive impact of HitH on patient care and notes the overall efficacy of the HitH programme (Caplan et al 1999, Montalto 2010, Montalto et al 2010, Varney et al 2014). Patient satisfaction is a goal in its own right and more importantly, patient satisfaction is an important determinant of patients' concordance with advice and treatment. Patients' views are considered as a legitimate, important measure of quality care and an in-direct measure of health outcome (Hardy & West, 1994).

The @home service

The @home service is a nurse-led integrated care team (including dedicated GPs and Consultant sessions) that aims to bring hospital care to patients in their homes or usual place of residence and is

commissioned by Lambeth and Southwark Clinical Commissioning Groups (CCGs) in London. The service is predicated on the aim of integrated care to improve patient experience, improve efficiency and achieve better value from health care delivery and reduce fragmentation in patient services (Shaw et al, 2011).

Southwark and Lambeth are amongst the most densely populated boroughs in London and the UK with a population of 610,000. The population is culturally and ethnically diverse with 28% of people born outside of the European Union, 60% from Black, Asian or other minority groups and over 150 languages spoken. A large number of people registered with General Practitioners within the two boroughs (43,300) are living with multiple long-term conditions, have complex needs and are frail or vulnerable and 6,700 people are in need of End-of-Life care. There are extreme distributions of income, educational achievement, access to employment and housing quality. An integrated approach to health care provision was essential to meet the needs of this diverse population and provided the justification for the setting up of the @home service.

The service aims to take up to 300 new patients per month and focuses on reducing avoidable hospital admissions and supporting rapid and safe discharge from three London hospitals' emergency departments, acute assessment units and acute wards (Lee & Titchener 2017; Lee, Pickstone, Facultad et al., 2017). Referrals from the acute hospitals are facilitated by two in-reach nurses based at St Thomas' and King's College Hospitals in central London. Their roles include participating in post-take ward rounds. In addition referrals are taken from GPs, specialist community teams and via the London Ambulance Service. The service provides intensive care with treatments, interventions and monitoring for a short episode through integrated team work with the aim to support the patient to return to their previous or an improved health status following an acute episode of ill health. Details on the service have previously been published in detail (Lee & Titchener 2017).

In summary, the service operates 365 days per year from 8am until 11pm, typically patients receive visits up to 4 times a day during their episode of care which on average ranges between 4.8 - 6.4 days.The patients are assessed within 2 hours of referral. The main criteria for referrals are adults aged 18 years and over, living and registered with a GP within Lambeth or Southwark and who have an acute onset of illness (this can include acute exacerbations of chronic conditions). The most frequently occuring conditions/interventions for which patients are admitted include:

- Chronic Obstructive Pulmonary Disease (COPD)
- Heart failure-including administration of IV Furosemide
- IV antibiotics for wound infections, chest infections, cellulites, Urinary Tract Infections (UTIs)
- Complex falls
- Hyper/hypotension, hyper/hypoglycaemia
- Hyponatraemia, Hyperkalaemia and other electrolytes imbalances
- Palliative care in partnership with other services
- Deteriorating renal function
- Post-operative care
- Hyperemesis
- Trial Without Catheter (TWOC) post-surgery

Given that @home is a relatively new service in the UK, the aim of this paper is to report on the evaluation of GSTT@home service surrounding patients' satisfaction.

Methods

The patient satisfaction questionnaire was tested for its reliability and validity prior to being distributed to the patients admitted to the service. Five sets of questionnaires were given to @home service clinicians at random for them to complete and provide feedback. The feedback required to establish

the questionnaire's reliability and validity were: (1) Relevance of the questions to the service delivery; (2) User friendly in terms of the layout and language use; (3) Ease of completing the questionnaire; and (4) length of time to complete. All five clinicians had provided positive reviews and collectively agreed that the overall questionnaire has full relevance to the day to day service we provide to the patients. The @home Service Evaluation Working Group developed the patient satisfaction and preference questionnaire based on key elements of the literature review and the tools used by Utens et al. (2013) and Jester and Hicks (2003a, b) as their validity had been established. In both studies, the questionnaires were validated following the procedure to develop a questionnaire that would provide answers to their respective research questions. The @home patient satisfaction questionnaire required some adjustments to meet the specific requirements of this evaluation. The questionnaire comprised of 20 questions, 19 of which used 5-point Likert response options including a neutral or don't know option. Question 9 required respondents to choose as many adjectives that applied from a list of 10 (7 positive & 3 negative). Although the evaluation working group did not include service users, service user views were elicited via discussion with the Trust's Communications and Public Relations group and the Patient and Public Engagement Specialist and patient representation during the designing of the pilot service. The questionnaires were distributed to patients via the @home Service team members during their visits, but were left with the patient and or their family to return in a pre-stamped envelope. The questionnaires were then reviewed by the @home Clinical Development Matron and an external academic advisor and data were entered onto an Excel spreadsheet. Patients were not required to provide their details. To minimise the risk of bias in analysis and to optimise neutrality all questionnaires were reviewed by the external academic advisor.

Data analysis

The questionnaire data were analysed descriptively and reported using frequencies and percentages. Where free text comments were recorded, we undertook basic thematic analysis to determine if there were common themes in the responses.

Ethical approval

Ethics approval was not required as this was deemed a service evaluation by the Trust.

Findings

A total of 1426 questionnaires were distributed between February 2015 and February 2016, with 206 (14%) were returned. The findings from the questionnaire are presented in two sections comprising the quantitative analysis of the closed questions and thematic analysis of the free texts comments made by some respondents.

Insert Table 1 here

Respondents were asked how likely they were to recommend the @home service and 200 (97%) replied that they were likely or very likely to recommend the service (**Figure 1**). This question mirrors one of the key questions in the NHS national patient survey with the assumption of a positive association between patients recommending a service and their satisfaction with the service.

Insert Figure 1 here

Patients were asked about their overall satisfaction with their treatment and 99% of respondents (n=203) reported being either very satisfied or satisfied (**Figure 2**).

Insert Figure 2 here

The responses to the other 18 questions demonstrate a high degree of patient satisfaction. The length of the visit is important in ensuring that optimal care is delivered and overall the majority of respondents (89%) believed the time was appropriate. This has to be balanced with staff workload and

the need to be efficient with their time. Overall, the respondents felt that the duration of the initial assessment as well as frequency follow-up visits were just the right length.

The survey also highlighted a small number of areas requiring on-going investigation and improvement. Specifically, Q10 "How often do the staff ask for your views about your condition and treatment?" with 37 (18%) respondents stating seldom or infrequently and a further 16 (8%) responding they didn't know. Also, regarding patients' pain, 22 (11%) of respondents reported either extreme or severe pain, and a further 70 (34%) reported mild pain. Patients referred to the service that were identified to have long-term pain issues had been referred back to the pain specialist services for further pain management which will need regular follow-up and review of pain medications.

Analysis of free text comments

A total of 48 of the 206 respondents provided qualitative free text comments, with the majority completed by patients and a small number by family members. The comments were very positive and supportive of the service, with only a few comments that could be considered negative or indicate a need for improvement and these are included in the thematic analysis of the comments presented below. The thematic analysis of the free text resulted in 5 themes and 1 sub-theme which are presented below with a selection of representative verbatim quotes to illustrate each theme. The themes most prevalent were:(i) Preferred being treated in their own home, (ii) A service to be proud of and (iii) Staff attributes with two further themes of (iv) family involvement and support and (v) feeling safe noted.

Theme 1: Preferred being treated in their own home

This theme related to respondents feeling they had recuperated better in their own home environment and had appreciated the choice of either not having to be admitted to hospital or being facilitated to leave hospital as soon as possible. *"@home team definitely helped my road to recovery at home instead of a hospital environment. I feel the @home service was extremely important to me. I*

was more comfortable at home conversations with nurses were not rushed and seeing me at home and they learnt a lot more about my home life and circumstances."

Theme 2: A Service to be Proud of

This theme related to satisfaction with the quality, organisation and delivery of the service. Overall, the patients and carers fed back that they were very satisfied with the service. One patient simply wrote "*A service to be proud of*" and another said that, "*I cannot praise this service highly enough as without this service my 89 year old mother would be taking up a hospital bed and not getting anything like the service she received from this team.*"

Theme 3: Staff attributes

There were a great many positive comments regarding the @home team and how patients and families had felt cared about, specifically the words kind, friendly and caring came up repeatedly within respondents' comments. There were only 2 negative comments regarding staff/member of staff and these are provided to ensure equity of reporting. One of the positive comments stated that, "*I thought the nurses provided a high standard of care and I had quite a good rapport with them. They were friendly, and supportive and very caring*". And of the negative comments states that, "*One male nurse was rude to me, I don't want to see him again, but all the others were brilliant."* The individual nurse was named by the patient on the feedback and was subsequently been spoken to by the Clinical Lead of the Service and addressed the behaviour with the opportunity to reflect, learn and an action to uphold the Trust's Values and Behaviours at all times.

Related to the theme of 'a service to be proud of', was a sub-theme of co-ordination of care and communication which reflected in the most part patients and families wanting to know when the team would be visiting so they could plan other activities such as meals, going out and visitors. However, one patient did comment "*Visits were at agreed times to suit me.*"

Theme 4: Family involvement and support of informal/family carers

This theme related to patient and families commenting positively about @home facilitating greater involvement of family in patient care and treatment and informal carers feeling supported by the team.

A comment from one the patient's family member: "*This service is important to the patient in that it allows the patient to be treated at home in friendly surroundings, with the added care of family members with professional backup to allow family members to be part of the care and treatment.*"

A message from one of the carers stated that: "*They gave me the support and knowledge to enable me as his carer to look after him to the best of my ability.*"

Theme 5: Feeling Safe

This theme concerned patients and/or their family feeling safe and supported whilst on the scheme. There was a general feeling from the patients and their next of kin that they are safe and well supported by the members of the @home service team.

"I feel very safe knowing I have the support of the @home service team."

Another commented: "*Both of us have felt in very safe hands and very supported by your wonderful team."*

Discussion

This survey has shown the benefits of the GSTT@home programme as reported by patients and their family/carers. The quantitative and qualitative components of the patient satisfaction questionnaire demonstrated a high degree of internal consistency between them i.e. the free text comments affirm the responses to the closed questions and this also demonstrates the validity of the questionnaire. The vast majority of respondents were very satisfied with their @home experience which aligns with results of previous published evaluation studies of services. The approach taken for the evaluation was to provide real time feedback to the @home team leaders regarding patients' responses and so areas

such as pain assessment and pain management on discharge were addressed as soon as the feedback was received. In terms of completing the survey, there were no comments from the respondents around difficulty in completing the questionnaire. Safety is also important to patients and vulnerability is an important consideration, especially when treating patients in their own home but there is a paucity of research in this area (Scanlon & Lee, 2007).

Others have demonstrated the benefits of the service (Caplan et al, 1999; Van Donk et al., 2009, Montalto 2010, Rodriguez-Cerrillo et al 2012, Varney, Welland & Jelinek 2014) and some propose that hospitals invest in HitH medical leadership and supervision to expand their HitH services (Montalto 2010). The growing number of older people over 60 years presents a challenging healthcare burden and it is projected that by 2030, there will be over 20 million people over the age of 60 years (Age UK, 2018). As care shifts from hospital settings to the community, it is expected that programmes such as the GSTT@home service will be a routine provision of healthcare service. Although these results have shown that patients and carers see the benefits of the @home service, a more detailed evaluation of the GSTT@home service would be useful to understand its contribution to the local health system and inform ongoing service development.

The service must be considered within the current constraints of the NHS and the issues of staff vacancies and lack of resources (both fiscal and personnel) and this has been outlined by a recent King's Fund response to the worsening crisis in the NHS (King's Fund, 2019). This affects the GSTT@home service too and in terms of managing capacity, the senior clinician on duty continuously reviews the capacity and demand of the service throughout the day to ensure accepted referrals are seen within the timeframe by appropriate clinicians and equally, patients already on the caseload are reviewed as per plan of care. The staffing level is one of the challenges that is recognised by the management team to ensure provision of a safe and high-quality care is consistently maintained. Hence when the service has reached its full capacity, this is escalated to the senior management and communicated to internal & external partners for service to temporarily close for new referrals until patients are discharged from the caseload and free up capacity. Another challenge which is very

important is the level of patients' acuity which can change throughout day. This will then require additional visits and senior clinical reviews if needed to establish clinical safety and appropriateness to remain being cared for in their usual place of residence. The service has developed an acuity tool specific to acute care in the community in order to have a consistent approach in reviewing patients' acuity level. It is currently being piloted and the results will be written up shortly.

As per the free text comments, the length of visit is important and overall the majority believed the time was appropriate whilst staff are also acutely aware of their workload and being efficient with their time. Overall, the respondents felt that the duration of the initial assessment as well as frequency follow up visits were just at a right length of time.

Despite the positive results, there are clear limitations that need to be acknowledged. The response rate was low and there needs to be further discussion about how this can be increased in the future to facilitate on-going feedback. Also, there were some issues with systems such as RIO being fit-for-purpose in terms of ease of data analysis. However, the data collected have demonstrated a high level of satisfaction for patients and a positive experience of the scheme.

It was recognised that in order to support on-going evaluation of the scheme, there needs to be dedicated human resource to administer the questionnaires, input the data, analyse the data and report findings. Future implementation of the Hospital at Home staff attributes screening tool should be part of the recruitment process. In order for staff to improve and enhance access to patients' information during home visits, the implementation of the mobile working using tablet computers. In terms of improving engagement from the referrers, it is recommended to invite key referrers to a meeting to identify how discharge information can be improved, the referral process made easier and more efficient and how to improve communication. And finally, it will be prudent to commence evaluating staff satisfaction/experience on a regular basis using a valid measure. Further evaluation of the service has demonstrated consistent positive comments with good feedback and the management team continue to review the service to ensure it is meeting local healthcare needs.

Conclusion

Patient satisfaction is an important part of service evaluation and has shown positive results from the small sample. The approach to the evaluation facilitated real-time feedback so that any issues raised by patients, staff or referrers can be discussed and actioned as soon as practically possible.

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Tables and Figures

Table 1: Questionnaire results (n=206)

Question:	**Extremely Likely**	**Likely**	**Neither Likely nor unlikely**	**Unlikely**	**Extremely Unlikely**
Q1: How likely are you to recommend @home Service?	156	44	2	2	2
Q2: Overall, how satisfied were you with your treatment on the scheme?	**Very Satisfied** 164	**Satisfied** 39	**Don't Know** 0	**Dissatisfied** 1	**Very Dissatisfied** 2
	Strongly Agree	**Agree**	**Don't Know**	**Disagree**	**Strongly Disagree**
Q3: The @home team have helped me understand about my illness/condition	108	82	11	5	1
Q4: The @home have made clear the treatment they are giving me and why	109	76	3	2	1
Q5: The @home team have kept me up-to-date on my progress	106	78	11	1	1
Q6: The @home team gave me time to discuss my treatment	102	81	11	4	1
Q7: The @home team are being clear about what medicines I am taking and why	104	77	12	4	1
Q8: The @home team are available to give me help when needed	110	67	27	3	
Q9: How do you describe the @home staff attitude towards you?	**Friendly** 180	**Helpful** 170	**Warm** 118	**Cold** 1	**Polite** 124
Q10: How often do the staff ask for your views about condition and treatment?	**Seldom** 20	**Infrequently** 17	**Don't Know** 16	**Frequently** 93	**Very Frequently** 58
Q11: I felt supported by caring and friendly @home staff during the treatment period	**Strongly Agree** 125	**Agree** 67	**Don't Know** 3	**Disagree** 0	**Strongly Disagree** 1
Q12: Were your concerns or worries addressed by the @home team?	Fully 96	Very Good 68	Adequate 21	Not Fully 1	Not Applicable 5
	Extremely Safe	**Very Safe**	**Safe**	**Unsafe**	**Very Unsafe**

Q13: How safe did you feel during the days in the treatment period?	106	60	30	1	
Q14: How safe did you feel during the nights in the treatment period?	74	54	40	5	1
	Extreme Pain	**Severe Pain**	**Don't Know**	**Mild Pain**	**No Pain**
Q15: How much pain have yon experienced since your discharge?	3	19	8	70	57
	Completel y Satisfied	**Very Satisfied**	**Satisfied**	**Dissatisfie d**	**Most Dissatisfie d**
Q16: How satisfied are you with how your medications were managed?	100	42	39	2	1
Q17: How satisfied were you with the management of your symptoms whilst on the @home Service?	104	44	39	2	
	Just Right	**Too Long**	**Too Short**		
Q18: The Length of time I was on the @home Service was:	151	2	16		
	Yes	**To Some Extent**	**Not at All**		
Q19: Did the @home Service supports you to resume your usual daily activities?	104	65	7		
	Just Right	**Too Long**	**Too Short**		
Q20: The length of the first home visit was:	167	5	8		
Q21: The length of the follow-up visits were:	171	2	6		

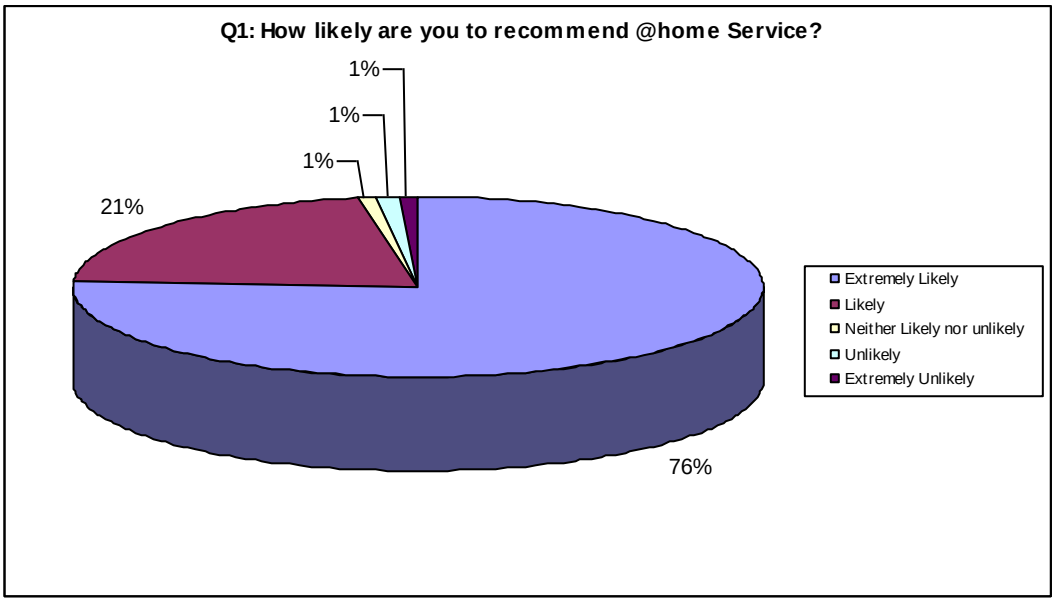

Figure 1: Likelihood of participants recommending @Home service

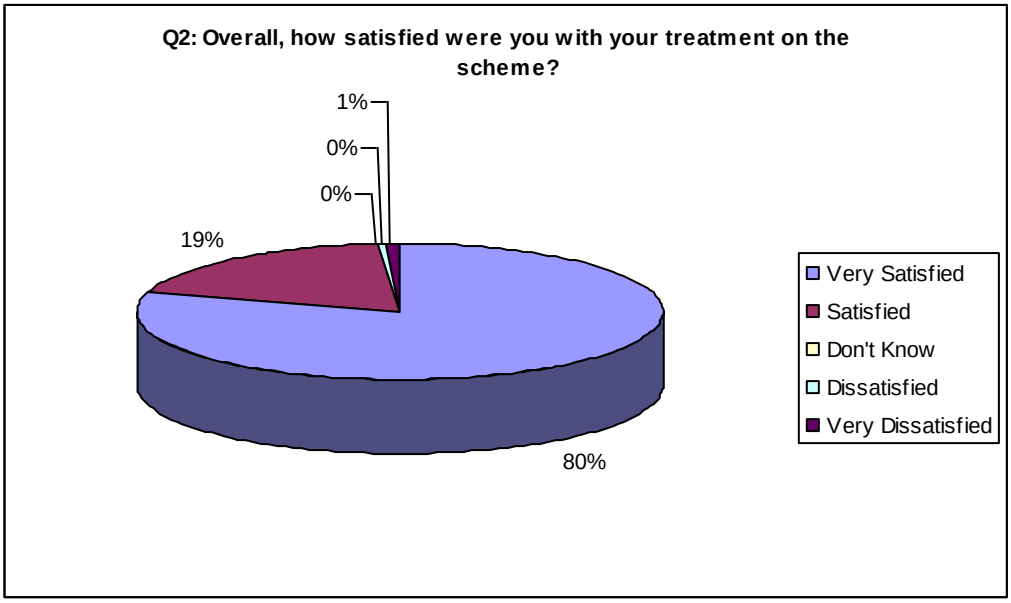

Figure 2: Overall satisfaction level of participants